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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

TRUJILLO, JAMES K

ART UNIT	PAPER NUMBER
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2116

DATE MAILED: 09/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/746,205

Applicant(s)

BRABENAC, CHARLES L.

Examiner

James K. Trujillo

Art Unit

2116

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 August 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2,3,5,9 and 12-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2,3,5,9 and 12-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. The office acknowledges the receipt of the following and placed of record in the file:
2. Claims 2-3, 5, 9, and 12-29 are presented for examination.

Claim Objections

3. Claims 5 and 9 are objected to because of the following informalities:
 - a. As to claim 5, "the determining operation" on line 3 of the claim should be changed to "a determining operation" because it currently lacks proper antecedent basis.
 - b. As to claim 9, "the determining operation" on line 5 of the claim should be changed to "a determining operation" because it currently lacks proper antecedent basis.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 2-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Graham-Cumming, Jr., (previously cited, "Graham") in view of McKaughan et al., U.S. Patent 5,802,305 ("McKaughan").
6. As to claim 2, Graham teaches a method comprising:

Art Unit: 2116

- a. receiving a packet (raw packet data) at a port filter (packet analysis module 100, figure 3), wherein the packet comprises a port identifier (Destination Port) [figures 1 and 2];
- b. determining whether there is host application associated (application identifier on line 209, figure 3) with the port identifier [also 605, 607 and 611, figure 6 and corresponding text]; and
- c. when there is not a host application associated with the port identifier, discarding the packet [623 figure 6, col. 7 lines 51-54 and col. 11 lines 14-19].

Graham further teaches that his invention may be implemented in systems with different types of software products, using various software architectures, which execute on standard computer hardware platforms [col. 8 lines 20-24]. This would suggest to one of ordinary skill in the art that his invention might be implemented on a laptop computer and a portable computer.

Graham does not specifically disclose when there is a host application assigned to the port number, *sending a wake-up message* to a power-managed host computer that is one of a laptop computer and a portable computer operable in either a power-managed state or an operational state.

McKaughan teaches sending a wake-up message to a power-managed host computer that is one of a laptop computer and a portable computer operable in either a power-managed state or an operational state [col. 3 lines 15-23 and col. 10 lines 50- 55]. Specifically, McKaughan teaches a computer system similar to that of Graham. The system of McKaughan, like Graham, filters packets based on the port numbers. In McKaughan, if a packet is accepted, it will send a

Art Unit: 2116

wake-up message to wake up the computer system [figure 4]. McKaughan also like Graham teaches that his system is usable in many types of computer environments [col. 10 lines 50-55]. McKaughan further teaches that power management in general refers to the ability of powering down a computer or certain devices when they are not being used. McKaughan further teaches that power is restored to the computer or devices when they are required for use [col. 3 lines 24-30]. McKaughan implements power management by supplying power only to devices required during packet filtering and acceptance or rejection thereof (power to the network card is maintained) [col. 6 line 60 through col. 7 line 9]. Thus, McKaughan teaches that power should be conserved in portable and AC powered computer systems and teaches an improved apparatus for doing so in a network environment.

It would have been obvious to one of ordinary skill in the art, having the teachings of Graham and McKaughan before him at the time the invention was made, to modify the system and method disclosed by Graham to include power management as taught by McKaughan to obtain sending a wake-up to a power-managed host computer when there is a host application assigned to the port number. The teachings of McKaughan would suggest to one of ordinary skill that power supplied to the entire computer is not necessary to determine if a host application is associated to a port number of a packet. One of ordinary skill would modify Graham, based on McKaughan teachings, by supplying power to the devices needed by the packet analysis module until a determination of the packet is made. Specifically, power would only need to be supplied to the elements in figure 3. If the packet were to be passed on to the application a wake-up message would be sent to power up the computer so that it may be processed. One of

Art Unit: 2116

ordinary skill would have made the modification to achieve power conservation in a computer system in a network environment in view of the teachings of McKaughan.

7. As to claim 3, Graham together with McKaughan taught the method according to claim 2 as described above. McKaughan teaches the method further comprising receiving the wake-up and changing the host computer from a power-managed state to an operational state [figure 4 and col. 8 lines 59-64].

8. As to claim 5, Graham together with McKaughan taught the method according to claim 2 as described above. Graham further teaches receiving information from the host computer and using the information to carry out a determining operation wherein the information comprises executable instructions (passing the packet to the identified application) [col. 12 lines 49-52]. It is interpreted that passing the packet to the identified application requires using software. Software contains executable instructions. Further, one of ordinary skill in the art would appreciate that once the packet is passed to the identified application, the application would process the packet. Processing the packet with the application also utilizes executable instructions.

9. As to claim 9, Graham together with McKaughan taught the method according to claim 2 as described above. Graham further teaches detecting a port in use by the host application (application to port mapping table) [col. 5 line 66 through col. 6 line 1]. Graham also teaches selecting information based on the port in use by the host application (application identifier) [col. 6 lines 4-10]. Finally, Graham teaches sending information to the port filter, wherein the port filter uses the information carry out a determining operation (determines which application is

Art Unit: 2116

appropriately handle the packet and the packet is sent to an application for processing) [col. 6 lines 18-21 and col. 7 lines 43-45].

10. As to claims 12-16 and 19-20, Graham together with McKaughan taught the claimed method. Therefore together they also taught the claimed signal-bearing media comprising instructions. Specifically, it appears that claims 12-16 and 19-20 recite the same limitations as those in claim 2-3, 5 and 9. Therefore claims 12-16 and 19-20 are rejected for the same reasons.

11. As to claim 17, Graham together with McKaughan taught the signal-bearing media according to claim 15 as described above. Graham further teaches wherein the information comprises data, wherein the data is to describe the host application (passing the packet to the application requires data that describes the host application) [619 and 710 in figures 6 and 7].

12. As to claim 18, Graham together with McKaughan taught the signal-bearing media according to claim 15 as described above. Graham further teaches wherein the information comprises data, and wherein the data is to describe the port number [col. 10 lines 15-28]. The port number is necessary because it is associated with application in Graham.

13. As to claim 21, Graham together with McKaughan taught the signal-bearing media according to claim 19 as described above. Graham further teaches wherein the information comprises data, wherein the data is to describe the host application (passing the packet to the application requires data that describes the host application) [619 and 710 in figures 6 and 7].

14. As to claim 22, Graham together with McKaughan taught the signal-bearing media according to claim 19 as described above. Graham further teaches wherein the information comprises data, and wherein the data is to describe the port number [col. 10 lines 15-28]. The port number is necessary because it is associated with application in Graham.

Art Unit: 2116

15. As to claims 23-29, Graham together with McKaughan taught the claimed method and claimed signal-bearing media. Therefore together they also taught the claimed apparatus. Specifically, it appears that claims 23-29 recite the same limitations as those in claim 2-22. Therefore claims 23-29 are therefore rejected for the same reasons.

Conclusion

16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

W. R. Stevens, "TCP/IP Illustrated, Volume 1 - The Protocols", Addison Wesley, 1994, page 226. This portion of the book teaches how port numbers are used in packets.

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James K. Trujillo whose telephone number is (703) 308-6291 [new phone number may be in effect in mid October - (571) 272-3677]. The examiner can normally be reached on M-F (7:30 am - 5:00 pm) First Friday Off.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynne Browne can be reached on (703)308-1159 [new phone number may be in effect in mid October - (571) 272-3670]. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

Art Unit: 2116

system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

James Trujillo
September 16, 2004



REHANA PERVEEN
PRIMARY EXAMINER